organopolysiloxane, (B) a filler, (C) a fluororesin of 5-50%, and (D) a curing agent. Applicant notes that the fluorosilicone rubber includes a fluororesin, but is not itself fluororesin. Therefore, the structure of the surface of the roller of Satoh et al. is different from that of the claimed invention, and Applicant submits that the rejection under 35 U.S.C. §102(b) is improper.

Claim Rejections under 35 U.S.C. §103(a)

Claim 2 is rejected under 35 U.S.C. §103(a) as being unpatentable over Satoh et al. The Examiner asserts that Satoh et al. teaches the invention cited above with the exception of the glass particles being mixed into only the primer layer.

Applicant respectfully disagrees with the above rejection, because the Examiner has failed to show references that teach all the limitations of the claims and a suggestion or motivation to combine or change the references to reach the claimed invention.

The present invention comprises a fixing roller comprising a core, a primer layer applied on the periphery of the core, and a fluororesin top layer applied on the periphery of the primer layer, wherein glass particles are mixed into at least one of the primer layer and the top layer.

As noted above, Applicant notes that Satoh et al. discloses a fuser roll having a layer of fluorosilicone rubber, **not** fluororesin, produced by curing a fluorosilicone rubber composition comprising (A) an organopolysiloxane, (B) a filler, (C) a fluororesin of 5-50%, and (D) a curing agent. Applicant notes that the fluorosilicone rubber includes a fluororesin, but is not itself fluororesin. Therefore, the structure of the surface of the roller of Satoh et al. is different from that

of the claimed invention, and one skilled in the art would not necessarily treat the different materials similarly.

Satoh et al. stresses that the use of fibrous and other fillers is for reinforcement of the fluorosilicone rubber. Satoh et al. further notes that the if the fillers are present at "less than 10 parts [by weight], a satisfactory reinforcing effect cannot be obtained." (Column 3, lines 63-64). Therefore, it is clear that the fibrous fillers are included for the purpose of reinforcement. One skilled in the art would not have been motivated to use the fillers of Satoh et al. in an amount of less than 10%, nor would one have been motivated to use the fillers for reason other than reinforcement. But as noted in the paragraph above, the outer materials of the present invention and that of Satoh et al. are different, and Applicant submits that the rationale as provided by the Examiner, that one would have used the glass fibers of Satoh et al. in the roller of the present invention is not valid, because the rollers have different outer materials. There is no suggestion that the material of the present invention requires the same (or any) reinforcement as the material of Satoh et al.

Applicant notes that the list of materials contemplated as fillers by Satoh et al. includes various fillers that "have been used conventionally in silicone rubber compositions", not necessarily in fluororesin compositions. Examples of the fillers taught by Satoh et al. include "reinforcing fillers, such as fumed silica, precipitated silica, which silicas may have been rendered hydrophobic, carbon powder, titanium dioxide, aluminum oxide, quartz powder, talc, sericite, and bentonite, and fibrous fillers, such as asbestos, glass fiber, and organic fiber."

Applicant submitted above that there is no suggestion that the material of the present invention requires reinforcement. The present specification teaches that the filler component is used to enhance scratch resistance of the surface of the roller. Applicant notes that the above list includes various materials that would not only not function as the desired scratch resistant material, but could actually decrease surface resistance. For example, Applicant notes that talc (Moh's hardness of 1.0), taught by Satoh et al. as equivalent filler to glass fibers (Moh's hardness for glass = 5.5), is far too soft to function as a surface scratch preventer. Applicant submits that by teaching the listed fillers as equivalent, Satoh et al. would lead one skilled in the art away from using the fillers for scratch resistance. And as indicated above, there was already not suggestion to use any of the fillers for reinforcement, as suggested by the Examiner, in a material that is different than that of Satoh et al. and which is not suggested as requiring reinforcement. Therefore, Applicant submits that one skilled in the art at the time of the invention would not have turned to Satoh et al. for suggestions for using a roller of the presently claimed structure.

Claims 1-4, 7, and 8 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,061,545 to Cerrah in view of Satoh et al. The Examiner concludes that it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of Cerrah with glass particles, in light of the teachings of Satoh et al. in order to provide a reinforcing material that is light weight and can withstand high temperatures.

Claims 5, 6 and 9-15 are rejected under 35 U.S.C. §103(a) as being unpatentable over Satoh et al. in view of JP 58017872 to Yakushiji. The Examiner asserts that Satoh et al. teach the invention cited above with the exception of having glass particles mixed into the primer layer.

As noted above, Applicant respectfully disagrees with these rejections because the cited references do not teach or suggest every element of the claimed invention. None of the references teach the uniquely claimed fixing roller comprising a core, a primer layer and a fluororesin top layer, wherein glass particles are mixed into at least one of the primer layer and the top layer.

Moreover, Applicant further disagrees with this rejection because Yakushiji would not give suggestions to one skilled in the art of fusion rollers, because Yakushiji is directed to brittle paint films and the problems associated with preventing peeling of the brittle paint layers. Moreover, Yakushiji employs glass particles for the purpose of causing the outer layer of paint to adhere to a primer layer of paint. Such a result would lead one skilled in the art away from use in a fixing roller, as one skilled in the art would not desire that layers stick to the roller. Therefore, there is no suggestion to use glass particles from this reference.

In view of the accompanying remarks, Applicant submits that claims 1-15 are in condition for allowance. Applicant earnestly requests such action at an early date.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicant's undersigned attorney to arrange for appropriate disposition of this case.

By: **Hiroyuki NAKANO**
Serial No. **09/748,012**

Examiner: **Marc Quemuel Jimenez**
Group Art Unit: **3726**

In the event that this paper is not timely filed, Applicant respectfully petitions for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees that may be due with respect to this paper to Deposit Account No. 01-2340.

Respectfully submitted,

ARMSTRONG, WESTERMAN & HATTORI, LLP

Kenneth H. Salen
Attorney for Applicant
Reg. No. 43,077

KHS/meu

Atty. Docket No. **001745**
Suite 1000, 1725 K Street, N.W.
Washington, D.C. 20006
(202) 659-2930

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